

*Interstate Pollution Control Act  
Rockford, IL 60008* (1)

**WESTON • SPER**

River Center, 111 North Canal Street, 8th Floor, Suite 855,  
Chicago, IL 60606 • (312) 993-1067

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION  
EPA CONTRACT 68-01-7367

Mr. Steven J. Faryan  
Deputy Project Officer  
Emergency Response Section  
Western Response Unit  
U.S. Environmental Protection Agency  
11th Floor  
230 South Dearborn Street  
Chicago, Illinois 60604

September 13, 1988

TAT-05-G2-00601

EPA Region 5 Records Ctr.



243435

Re: Assistance for Seven Sites, Region V  
TDD# 5-8806-30

Dear Mr. Faryan:

The U.S. Environmental Protection Agency (U.S. EPA) on June 30, 1988, tasked the Technical Assistance Team (TAT) to review U.S. EPA files on seven potential hazardous waste sites in Region V to evaluate the immediate threats to human health and the environment. The seven sites have previously been scored through the Hazard Ranking System (HRS) by the Field Investigation Team (FIT) and are either being proposed or are currently on the National Priorities List (NPL) awaiting remedial action. The following letter report details the TAT findings and recommendations.

TAT members Paul Szewczykowski and Richard Mehl reviewed in detail the FIT reports and various other documents within the U.S. EPA files. In the attached report the TAT compiled a description of each site, information on immediate threats to human health and the environment, and recommendations to mitigate the threats.

On July 12, 1988, TAT members Szewczykowski and Mehl met with U.S. EPA representatives Steven Faryan, Bill Simes, Len Zintak and Nick Longo. The TAT verbally presented preliminary reviews of each site and recommended actions to the U.S. EPA.

Roy F. Weston, Inc.

SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

In Association with ICF Technology Inc., C.C. Johnson & Malhotra, P.C., Resource Applications, Inc.,  
Geo/Resource Consultants, Inc., and Environmental Toxicology International, Inc.



Mr. Steven J. Faryan

-2-

September 13, 1988

Should you have any questions or require additional information, please feel free to contact us.

Very truly yours,

ROY F. WESTON, INC.

*Paul Szewczykowski*  
Paul Szewczykowski  
Hydrogeologist

*for Scott D. Springer*  
for Scott D. Springer  
Technical Assistance Team  
Leader, Region V

PS:sdb

**GENERAL TECHNICAL ASSISTANCE**

**FOR**

**SEVEN SITES  
REGION V**

**Prepared For:**

**U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, Illinois**

**CONTRACT NO. 68-01-7367**

**TAT-05-G2-00601**

**TDD NO. 5-8806-30**

**Prepared By:**

**WESTON-SPER  
Technical Assistance Team  
Region V**

**September 1988**

## INTERSTATE POLLUTION CONTROL, ROCKFORD, ILLINOIS

Interstate Pollution Control operated from 1974 until 1982 as a hazardous waste storage facility that accepted solvents, paint sludges, cyanide wastes and waste oils. Currently the site is active and accepts only waste oils. Site access is unrestricted. The facility has a main gate and is fenced; however, the fencing is reportedly damaged on the south side.

The FIT report (1987) documented the following on-site hazards:

- o A 100,000 gallon tank containing liquids. The tank was noted to have had a leaking valve by the Illinois Environmental Protection Agency in 1984, and material in the tank was analyzed and contained cyanide, cadmium, chromium, lead, and copper.
- o An unlined lagoon containing approximately 5000 yd<sup>3</sup> of hazardous sludge. The sludge was analyzed and contained toluene, xylene, PCBs and aliphatic hydrocarbons or polycyclic aliphatic hydrocarbons.
- o Ground water was analyzed from monitoring wells on site and a variety of volatile organic chemicals (VOCs) were detected. Removal action levels for 1,1,1-trichloroethane were exceeded in one well. The ground water samples did not contain elevated metal contamination

Based upon the FIT findings, the TAT recommends the following actions for this site:

- o Repairing the site fence;
- o Conducting a site assessment to document the presence of on-site wastes; and
- o Sampling residential wells for VOC analysis.

## REFERENCES

- 1) Ecology and Environment (E & E). 10/11/84. Potential Hazardous Waste Site, (PHWS) Site Inspection Report.
- 2) Field Investigation Team (FIT) E & E. 3/4/87. Hazardous Ranking System (HRS) Report.

### Woodstock Municipal Landfill, Woodstock, Illinois

The Woodstock Municipal Landfill began operation in the 1950's and was used as an open dump until 1969, when trenching operations began. From 1972 through 1976 electroplating sludge and lime sludge from the municipal sewage treatment plant were disposed of at the site. The landfill which has neither a leachate collection system nor a liner, is now closed and capped. Site access is reportedly unrestricted.

The Kishwaukee River is located approximately 125 feet south of the site. The city of Woodstock and surrounding residents obtain drinking water from the same aquifer potentially impacted by the landfill. The nearest residential well is reported as being 1,250 feet north and municipal wells are located 1.5 to 3.0 miles from the site.

The FIT report (1987) documented the following on-site and off-site hazards:

- o Leachate seeps are present on the landfill cap surface and surface soils are contaminated with leachate. Soil samples collected at leachate seeps were contaminated with heavy metals, pesticides and organics. Concentrations of copper, lead, nickel, zinc, and cadmium in soil samples exceeded the natural range in soils (U.S. EPA, 1983).
- o The potential for ground water contamination exists at the site, however, no ground water sampling was conducted by FIT.

Based upon the FIT findings, the TAT recommends the following:

- o Conducting a site assessment; and
- o Sampling off-site to determine extent of contamination.

### REFERENCES

- 1.) U.S. EPA Office of Solid Waste and Emergency Response. 1983. Hazardous Waste Land Treatment. Pg. 273.
- 2.) E & E. 8/2/85. PHWS, Site Inspection Report.
- 3.) FIT (E & E) 1987. HRS Report.

Reilly Tar and Chemical Corporation, Dover, Ohio.

Reilly Tar and Chemical Corporation is an inactive coking plant and foundry. The plant and foundry operated from 1910 until the late 1920's. Between 1932 and 1956 the corporation operated a coal tar refinery on the site. Unknown quantities of coal tar wastes have been deposited on and below the surface of the site. The site is partially fenced. Approximately 60 percent of the population of the city of Dover and 10 percent of New Philadelphia is within one mile of the site. Ground water within a three-mile radius of the site is used extensively for drinking.

The Hazardous Ranking System (HRS) summary documented the following on-site hazards:

- o Ground water samples at the site were contaminated with many coal tar related compounds including polycyclic aromatic hydrocarbons (PAHs) such as naphthalene, acenaphthylene, fluorene, phenanthrene and anthracene. Also present were compounds such as benzene and toluene (Tables 1 & 2). PAH compounds have a proposed federal water quality criteria for cancer risk of 2.8 micrograms per liter (ug/L) and for benzene 0.35 ug/L (Weston, 1987). PAH values reportedly were 2,700 ug/L and benzene 75 ug/L.
- o Surface soils exhibited contamination of coal tar compounds.
- o On-site and off-site downgradient monitoring wells revealed contamination in an aquifer which leaks or leads to the aquifer used by the community.

Based upon the FIT findings the TAT recommends the following:

- o Conducting a site assessment; and
- o Sampling additional downgradient ground water residential/municipal wells to determine contamination from PAHs and organics.

REFERENCES:

- 1.) FIT (E & E). 1987. HRS Summary Addendum.
- 2.) Surface Soil Samples taken by FIT (E & E on 9/12/84. Samples analyzed by ERCO.
- 3.) Weston/SPER. Jan. 30, 1987. General Guidelines for Potable Water Quality.

Table 1 - Results for Volatile Organics Samples (ug/l)  
 Reilly Tar and Chemical Company  
 Dover, Ohio  
 March 19, 1985

IDENTIFIED ORGANIC COMPOUND	WELL			
	MW-1 Upgrade	MW-2	MW-4	MW-5
Chloroform	180	-	-	-
1,1,1-Trichlorethane	5.1	-	-	-
Carbon Tetrachloride	94	-	-	-
Naphthalene	-	680	2700	1500
2-Methylnaphthalene	-	38	547	150
Acenaphthylene	-	42	230	26
Dibenzofuran	-	25	145	55
Fluroene	-	62	151	50
Phenanthrene	-	32	150	64
Trichlorethane	-	11	-	-
Toluene	-	12	72	36
Ethylbenzene	-	64	-	7.1
Benzene	-	-	75	24
Anthracene	-	-	29	13
Fluoranthene	-	-	25	14

SOURCE: FIT (E&E). 1987. HRS Summary Addendum.

Table 2 - Results for Volatile Organics Samples (ug/l)  
 Reilly Tar and Chemical Company  
 Dover, Ohio  
 March 19, 1985

IDENTIFIED ORGANIC COMPOUND	WELL			
	MW-1 Upgrade	MW-2	MW-4	MW-5
Pyrene	-	-	16	1
2-Methylphenol	-	-	-	20
4-Methylphenol	-	-	-	25
D-n-butylphthalate	-	-	-	13

SOURCE: FIT (E&E). 1987 HRS Summary Addendum.



N.W. Mauthe Company, Appleton, Wisconsin

N.W. Mauthe Company is an inactive chromium electroplating facility which operated from 1956 through 1976. The company presently operates a plating facility in a building located northeast of the site. The facility was a generator of chromium waste. The site is unfenced and accessible to the general public. The FIT report estimated that approximately 10,000 people reside within a one mile radius of the site.

The FIT report (1987) documented the following on-site hazards:

- o Containers of chemicals and chrome bearing water in a floor through leaking under the building.
- o Contamination of the shallow, unconsolidated glacial deposit aquifer. The FIT ground water sampling in 1984 indicated that the ground water contained several organics and metals. Removal action levels for methylene chloride and chromium were exceeded. However, this aquifer overlies a limestone bedrock, which is underlaid by a sandstone aquifer used predominantly as the water supply for private wells within a 3 mile radius. The FIT report stated that no contaminants were detected in the aquifer of concern.

Based upon the FIT findings, the TAT recommends the following:

- o Conducting site a assessment to evaluate hazardous materials on site;
- o Sampling on-site soils and private wells downgradient to determine extent of contamination and imminent threats.

REFERENCES

- 1.) FIT (E & E). 1987. HRS Report.
- 2.) Ground Water Samples taken by FIT 2/85 and submitted to Rocky Mountain Analytical.
- 3.) Ground Water Samples taken by FIT 2/84 and submitted to GCA.

**Lakeland Disposal Services, Inc., Claypool, Indiana**

Lakeland Disposal Services, Inc. is a sanitary landfill that operated from 1974 until 1978. The landfill was permitted to accept hazardous waste material. The amount of hazardous waste accepted is unknown. The site is not fenced and the landfill reportedly has an inadequate liner.

The FIT report (1987) documented the following on-site hazards:

- o Cadmium, chromium and arsenic were identified in ground water samples from on-site monitoring wells with contamination attributed to the site.
- o Leachate ponded on the landfill surface.
- o An Indiana State Board of Health (1984) report documented the presence of tanks filled with chromate sludge, high levels of methane, and leachate seeps along Sloan Ditch which passes through the center of the landfill and drains into Palestine Lake, a recreational lake.
- o Stained soils were observed on the site surface potentially from the dumping of oil like substances.

Based upon the FIT findings, the TAT recommends the following:

- o Conducting a site assessment;
- o Sampling of on-site soils and leachate;
- o Sampling of the nearest downgradient residential wells; and
- o Sampling of water and sediments in Sloan Ditch and possibly Palestine Lake.

**REFERENCES**

- 1) FIT (E & E). 1987. HRS Report
- 2) Indiana State Board of Health. 4/19/84. PHWS, Preliminary Assessment Report.

### Yeoman Creek Landfill, Waukegan, IL.

Yeoman Creek Landfill is a closed and capped landfill which operated from 1959 until 1969. Specific quantities of hazardous wastes disposed of at the site were not described in the FIT (1986) report. The site is not fenced and the landfill reportedly has no liner.

Yeoman Creek drains to the Waukegan River which in turn drains to Lake Michigan. The drinking water intake for the city of Waukegan is located approximately 4800 feet into Lake Michigan from the mouth of the Waukegan River. Approximately 326 wells are reported to be within a 3 mile radius of the site.

The FIT report documented the following on-site and off-site hazards:

- o Leachate seeps were observed migrating into Yeoman Creek.
- o Sediments from Yeoman Creek both on-site and downstream in Yeoman Park were contaminated with PCBs, pesticides, semi-volatile and volatile compounds and some metals. The highest concentrations in sediments included Arochlor 1248 (2620 ppb), benzo b&k flouranthene (1460 ppb) and methylene chloride (128.91 ppb).

Ground water samples were collected from monitoring wells; however, contaminants detected in upgradient wells did not increase in downgradient wells.

Based upon the FIT findings, TAT recommends the following:

- o Conducting a site assessment; and
- o Sampling upstream and downstream water and sediments from Yeoman Creek.

### REFERENCES

- 1) E & E sampling data. 4/3/85.
- 2) FIT (E & E). 1986. HRS Report.

### Waste Management of Wisconsin Landfill, Brookfield, Wisconsin

The Waste Management of Wisconsin Landfill accepted municipal waste until 1980. There is no record of hazardous waste disposal at the site.

The site overlies two shallow interconnected aquifers. Both municipal and private wells draw from these aquifers. The nearest residential well is reportedly 600 feet northwest of the site. The FIT report stated that there was no apparent direct contact threat. The site is not completely fenced.

The FIT report (1987) documented the following on-site hazards:

- o Cyanide was detected in downgradient monitoring wells at greater concentrations than in upgradient wells, but concentrations were below removal action levels.

Based upon the FIT findings, the TAT recommends the following:

- o A site assessment to verify the FIT findings and note changes in site conditions.

Pending the outcome of the site assessment it may be necessary to sample and analyze residential and/or municipal wells for cyanide contamination.

### REFERENCES

- 1.) FIT (E & E). 1987. HRS Report.
- 2.) Lab Data, Encotech. 6/14/85. Lab numbers ED359-362 and Ed809-11.
- 3.) Lab Data, Compuchem. 6/4/85.  
EPA Numbers 4479-MET656-658 and MEF652.